

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO	. 1	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,283	_	10/12/2001	Wenbin Dang	GPT-024.01	1639
29755	7590	02/22/2006		EXAM	INER
FOLEY H		_	AZPURU, CARLOS A		
PATENT (/ORLD TRADE CEÌ LEVARD	ART UNIT	PAPER NUMBER	
BOSTON,	MA 021	10-2600	1615		

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		09/976,283	DANG ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Carlos A. Azpuru	1615			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
WHI(- Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANS IN THE MAIL	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
	Responsive to communication(s) filed on <u>21 Not</u> This action is FINAL . 2b) This Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposit	ion of Claims					
5)□ 6)⊠ 7)□ 8)□ Applicat i 9)□ 10)□	Claim(s) 2-7,24-28,36-38,40,43,44 and 60 is/ar 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 2-7,24-28,36-38,40,43,44 and 60 is/ar Claim(s) is/are objected to. Claim(s) are subject to restriction and/or ion Papers The specification is objected to by the Examiner The drawing(s) filed on is/are: a) acceeds the property applicant may not request that any objection to the confection of the conf	vn from consideration. re rejected. r election requirement. r. epted or b)□ objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is objected to be the drawing(s).	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some color None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
2) 🔲 Notic 3) 🔯 Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date 11212005	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	(PTO-413) ite atent Application (PTO-152)			

Art Unit: 1615

DETAILED ACTION

Receipt is acknowledged of the information disclosure statement filed 11/21/2005.

Applicant's arguments with respect to claims 2-7, 24-28, 36-38, 40, 43-44 have been considered but are most in view of the new ground(s) of rejection.

It should be noted, that due to a review of the teachings of the applied reference, a rejection under 35 USC 103(a) over Wen et al in view of Mao et al is cited. The reasoning for this will be discussed below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-7, 24-28, 36-38, 40, 43-44, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wen et al in view of Mao et al.

Wen et al disclose a biocompatible polymer having phosphate-based linkages and one or more radiosensitizers (see introduction as well as materials and methods). The composition may have up to 25% loading level, and may be in the form of microspheres

(see page 66, column 2, paragraph 3). Delivery may be for a period of about 50 days (see Figure 1). The limitation to subsequent treatment with electromagnetic radiation is viewed as an intended use since applicant is claiming a composition, not a treatment. Further, limitations drawn to the reduction in doubling time, inhibition of neoplasm by reduction in volume, therapeutic index and ED50 are considered inherent properties of the same biocompatible polymer containing radiosensitizers as disclosed by Wen et al. Wen et al does not specifically recite the microsphere size of the claimed particles.

Page 3

However, in the article by Mao et al which is incorporated by reference, biodegradable polyphosphoester particles are disclosed as sized between 3 and 50 um (see page 55, column 2, second full paragraph). Therefore, those of ordinary skill would find it well within their skill to form the microspheres by Wen et al, and further to size them below 250 (or 100) um as incorporated by reference in the Mao et al article. A kit using said formulation would also be within the skill of the ordinary practitioner in that they would be very familiar with dosing and administration parameters, as well as the possible subsequent administration of electromagnetic radiation. The ordinary practitioner would further expect similar chemotherapeutic results from the instant formulation given the teachings of Wen et al in view of Mao et al. There are no unusual and/or unexpected results which would rebut prima facie obviousness. As such, the instant composition would have been obvious given the teachings of Wen et al in view of Mao et al.

Art Unit: 1615

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos A. Azpuru whose telephone number is (571) 272-0588. The examiner can normally be reached on Tu-Fri, 6:30 am - 5:00 pm.

Art Unit: 1615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Carlos A. Azpuru Primary Examiner

Art Unit 1615

ca